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# LOS ALAMOS NATIONAL LABORATORY

Solving National Security Challenges through Scientific Excellence  
R&D 100 Award Winners and Special Recognition Medalists

## Autonomous, Low-cost, Fast Leak Detection System (ALFa LDS)

Joint entry with Aeris Technologies and Rice University

## Atomic Armor

## DeltaFS: Rapidly Searching Big Data to Accelerate Scientific Discovery

Joint entry with Carnegie Mellon University

## Fast, Easy, Accurate and Robust Continuum Engineering (FEARCE)

## MC-15 Portable Neutron Multiplicity Detector

Joint entry with Lawrence Livermore National Laboratory and Sandia National Laboratories

## Rapid, Easy Tools for Responding to Outbreaks and Re-Emergence Events (RETRO Rx)

Joint entry with the University of California – Santa Barbara, University of New Mexico, University of Virginia, and Specifica Inc.

## Severe Contingency Solver for Electric Power Transmission Analysis

## SimCCS<sup>2.0</sup>

Joint entry with Indiana University and Montana State University

## Smart Platforms Leveraging Automated Sample Handling (SPLASH)

## Unified Communications X

Joint entry with Advanced Micro Devices, Argonne National Laboratory, Arm Ltd, Google, Mellanox Technologies, NVIDIA, Stony Brook University, Oak Ridge National Laboratory, and Rice University



For more information on scientific partnership and licensing opportunities, contact the Los Alamos National Laboratory Richard P. Feynman Center for Innovation



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# Unleashing Innovation from Los Alamos National Laboratory



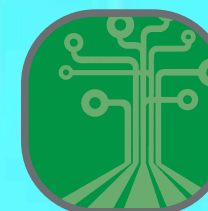
## Advanced Materials

Developing advanced materials for applications such as 2-D coatings protecting sensitive materials from harsh environments, next generation high performance explosives, and rare earth starting materials to improve processing under mild conditions.



## Data Analytics

Creating novel platforms to tackle everything from computational protein and enzyme design, to epidemiological forecasting and vaccine development, and the use of neural networks and machine learning for the detection of natural gas leaks.



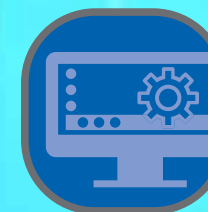
## Infrastructure

Advancing important capabilities needed for infrastructure that has a major impact on national security, such as resiliency of the electric power grid and planning a network of piping for carbon dioxide transport and sequestration.



## Sensors

Producing technologies ranging from microfluidics, miniature flow viscosity sensors, to the detection of neutron multiplication in support of nuclear threat detection, to structural health monitoring of bridges.



## Software

Providing a distributed file system to alleviate the metadata bottleneck and accelerate highly selective computer queries, deliver high performance computing infrastructure to simplify deployment of research tools, and modeling and simulation of physical processes.

Los Alamos has identified a broad range of technologies that have the potential to enhance an existing product, define a new product, or launch a start-up. Our technologies can give organizations a competitive edge. Los Alamos Technology Snapshots identify technologies that are at different stages of development, some ready to license and others looking for a partner to help mature into a disruptive application. Visit our website [www.lanl.gov/feynmancenter](http://www.lanl.gov/feynmancenter) to explore the wide variety of technologies available.



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